ABSTRACT

A microcontroller with embedded software for automatically detecting a baud rate of an asynchronous serial bit stream during an initial set up phase of a microcontroller. The microcontroller is configured to receive a data set from a transmitter and includes a transition detector for identifying bit transitions in the data set. The microcontroller includes a timer triggered by the transition detector that is measures the time interval between two predefined bit transitions, a storage element for registering the measured time interval, and a look up table that provides defines baud rates relative to various time intervals that can be accessed to determine a nearest baud rate value corresponding to the registered time interval.